

# BRIXMENT

What It Is What It Does How It Does It and Why





0 Y 0 ... 0 Y 0

# BRIXMENT THE PERFECT MORTAR

AUG 24 125

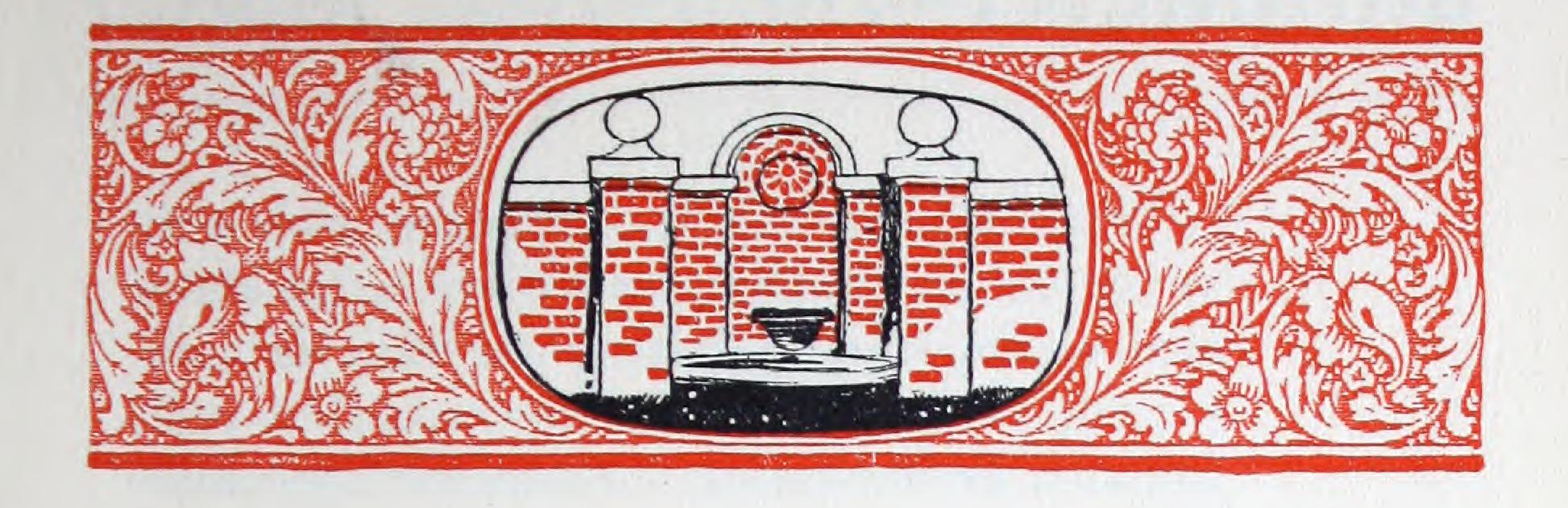


Manufactured by
LOUISVILLE CEMENT COMPANY

Incorporated Louisville Kentucky

40...O 10...O 10...O 10.00 10...O 10...O 10...O 10...O

Copyright, 1921
Louisville Cement Co., Incorporated
Louisville, Ky.



What It Is

RIXMENT is a cement brick mortar of greater strength, greater endurance, greater economy and greater architectural advantages. It is made of argillaceous limestone, unsaponifiable oil (or waxy material) and oily shale by an

exclusive process patented in the United

States and foreign countries.

The limestone, which is high in alumina and combined lime and silica, is first crushed to uniform size. It is then burned in upright kilns, passed through suitable mills and finally through a ring-roll reducer where such a fineness is obtained that 85 per cent. will pass through a 200-mesh screen. After that it is placed with the oily materials in a specially constructed hydrater and sufficient water is added for the complete hydration of the lime which has resulted from the breakup of the calcium aluminates.

30

When reaction has taken place, it is conveyed to steel hoppers and there, after about two weeks, the hydrating reaction is completed. It is then passed through tube mills for final pulverization. From the tube mills it is conveyed to storage bins ready for bagging and shipping.

Greater Strength and Endurance It is recognized by authorities that the initial set of cement is due to the breaking up of the calcium aluminates upon the admixture of water. This operation liberates lime which undergoes hydration to calcium hydrate. The final strength of hardened cement, however, is recognized as the result of the hydration of the calcium silicates present. Consequently, to its high content of calcium silicate, the unusual strength and endurance of BRIXMENT are due.

Here is a practical demonstration of the crushing strength of BRIXMENT—the result



of a test made by Robert W. Hunt and Company, of Chicago. Three specimens of BRIXMENT were used with one-third sand in a half-inch joint between two common brick. All were tested at the age of 28 days:

Specimen Specimen Specimen

Mortar started to crush at about 20,000 23,000 19,000 Brick started to crush at about . 25,000 25,000 24,000

The early strength of BRIXMENT approaches that of Portland Cement mortar; after the lapse of a few months they are of equal strength.

In the use of cements in mortar, the set is frequently interfered with by retempering. Such mortar never becomes as strong as it would have been if the set had not been

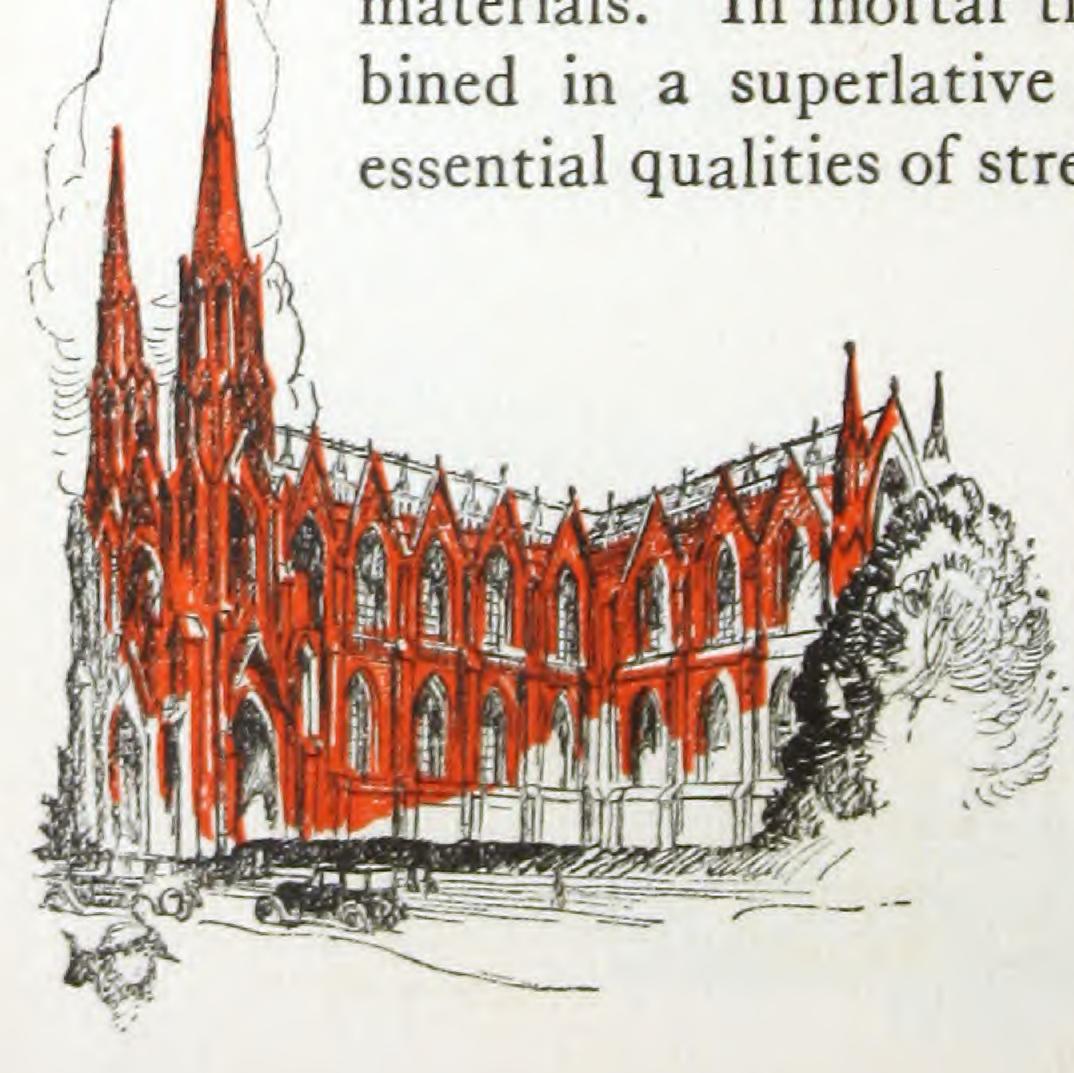
Unimpaired
By
Retempering



30

impaired by retempering. No such impairment occurs in BRIXMENT because the quick-setting substances in it have been retarded and the slow-setting silicates (to which the ultimate strength is due) retain their ability to set and cause the mortar to become hard even though retempered. BRIXMENT, therefore, may be mixed in large batches and tempered more slowly, if necessary, than is the usual practice when other cements are employed.

Greater Economy BRIXMENT is composed of definite elements in chemical equilibrium, according to an unvarying formula. When gauged with good sand and properly tempered, it may be depended upon to produce uniformly good results without the admixture of other materials. In mortar thus obtained are combined in a superlative degree not only the essential qualities of strength and permanence



30

30

but also that much-desired element of economy in time, labor and money.

BRIXMENT needs no slaking before use, as any free lime it may contain is hydrated in the process of manufacture. For this reason it is constant in volume, may be relied upon not to pop, crumble or scale from rain after becoming hard in the work and joints made with it will remain smooth, as finished by the mason. As no preliminary preparation is required and as the mortar may be mixed when and where it is wanted and as it may be used immediately after mixing, much time is saved and also the expense and labor of making mortar-beds.

Needs No Slaking

Plus increased strength, BRIXMENT has the advantage of greater plasticity or fatness—a property much appreciated by mechanics because with it less time and effort are required in laying up brick than with short, non-plastic mortars.

Greater Plasticity

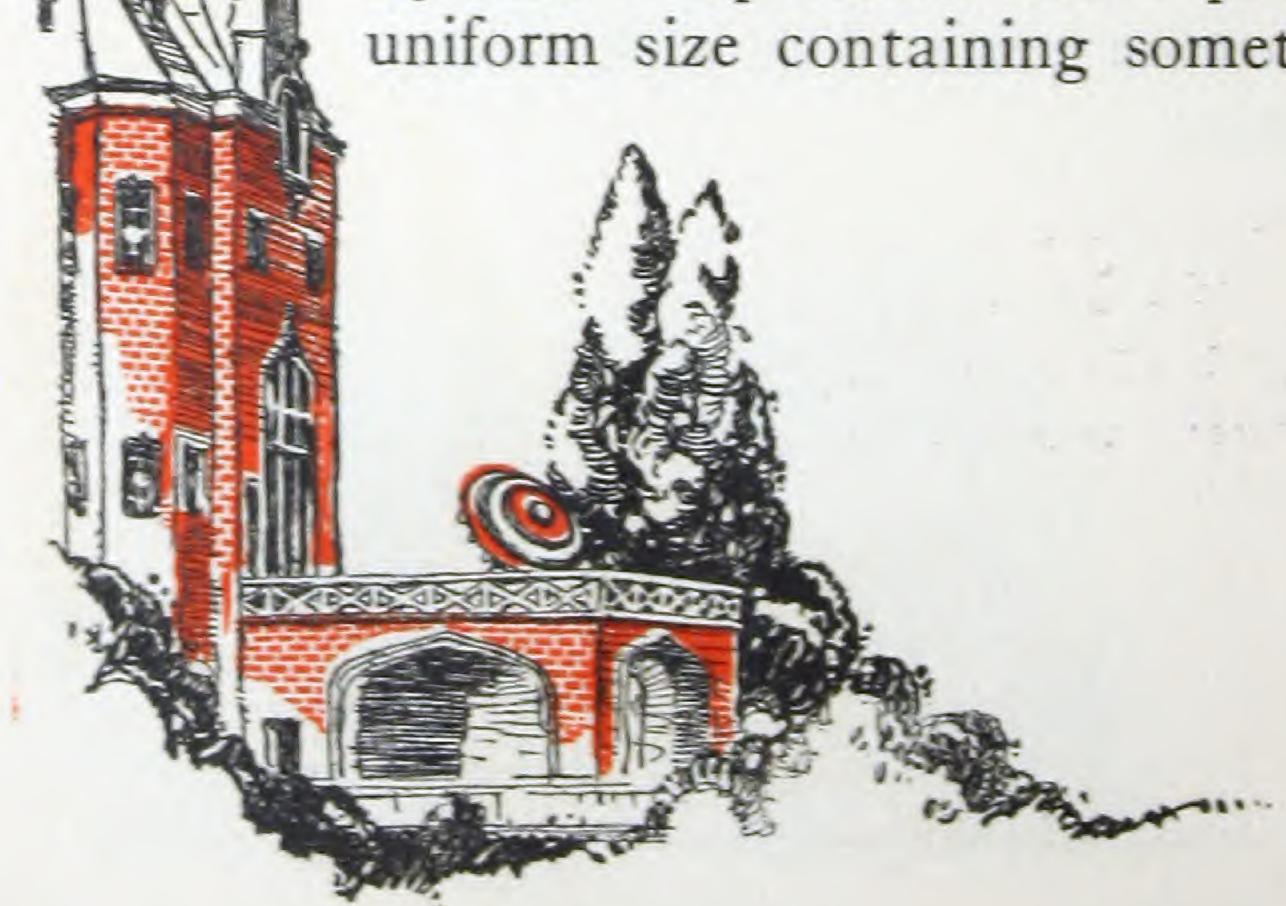


30

Will Not Become Air-Set BRIXMENT'S inherent ability to resist moisture is another advantage highly favored by dealers, as it may be stored longer than any other cement without deterioration through becoming air-set or lumpy. Samples taken from a dealer's stock after two years' storage, showed no impairment of strength or commercial condition and the test briquettes made with them doubled in strength between the 28-day and the 90-day periods.

Greater Architectural Advantages Mortars made of lime, Portland Cement and sand, or of other things in combination with these materials, are losing favor with architects because of the uncertainty in practice of properly measuring the ingredients in accordance with the specifications. This uncertainty is avoided by the use of BRIXMENT.

BRIXMENT is invariably uniform in quality and composition and is packed in bags of uniform size containing something over one



જ

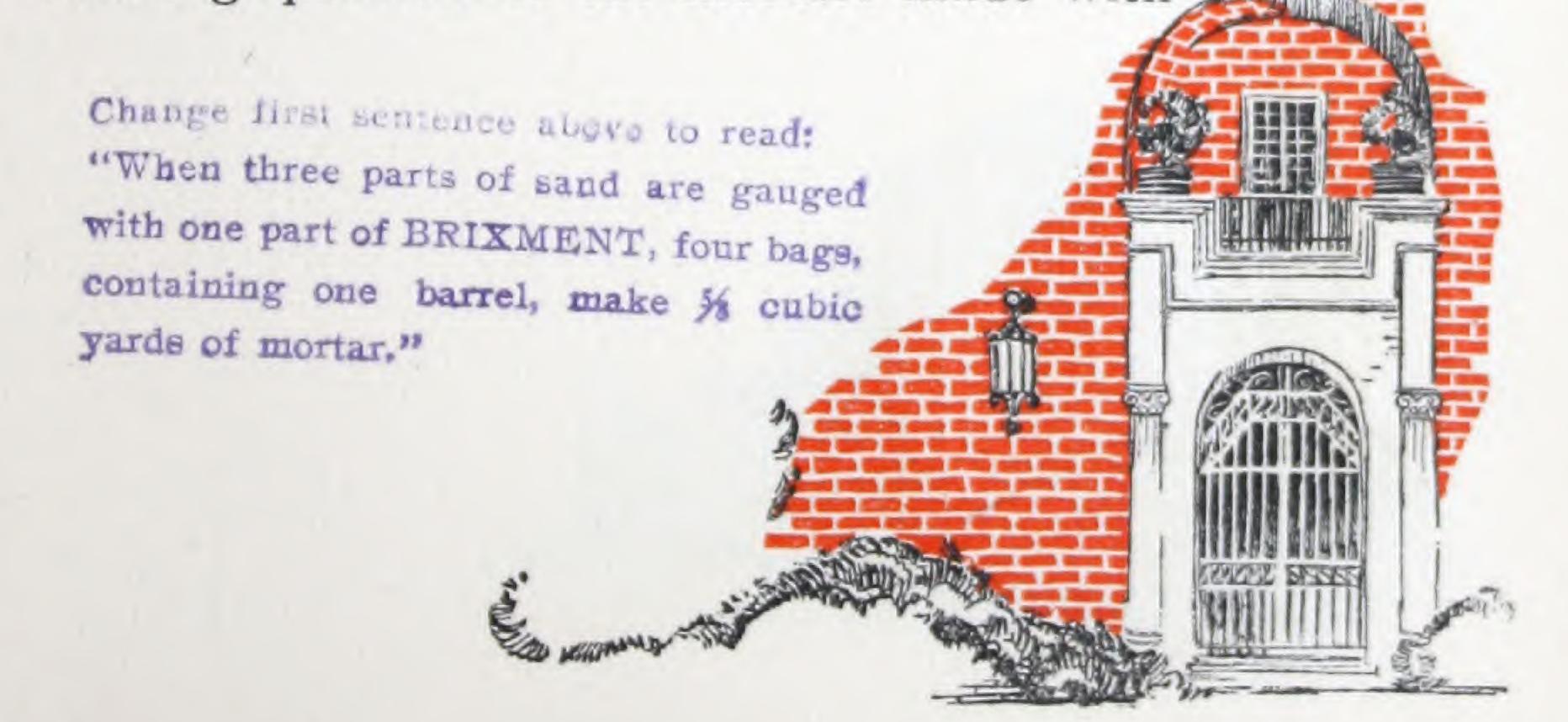
30

cubic foot each. When three parts of sand are gauged with one part of BRIXMENT, nine bags, containing 2½ barrels, make one cubic yard of mortar. Therefore, the proportion of binding material required by the specifications need not be left to the discretion of the mortar-mixer as is the practice in the use of lime mortar tempered with cement.

The oily content not only imparts a greater plasticity to BRIXMENT, thus making it easier to work and assuring smooth joints, but also makes it impervious to moisture. Joints when set and dried, repel water instead of absorbing it—an obvious advantage for use in cold weather, besides rendering the work almost waterproof.

"The BRIXMENT produced about the same water-repellent qualities as the water-proofed white cement, and the absorption-resisting qualities of the mortars made with

Repels Moisture



30

the two cements in the same proportion, appeared to be about equal."—Report of The American Bureau of Inspection and Tests, March 21, 1921.

Inert to Mortar Colors BRIXMENT is inert to mortar colors and does not cause the color of the mortar to fade. Less color is required to obtain the desired shade than is necessary when using mortars made with other cements.

Practical Tests The following communication from The David Hummel Building Company, a leading masonry contracting company of Cincinnati, Ohio, contains a report of practical tests of BRIXMENT on two important jobs in that city:

"Answering your question as to our opinion of BRIXMENT, after having used same on the Lunkenheimer Foundry job, and the Dixie Terminal Building, of this city, wish to say that we have no hesitancy in recommend-

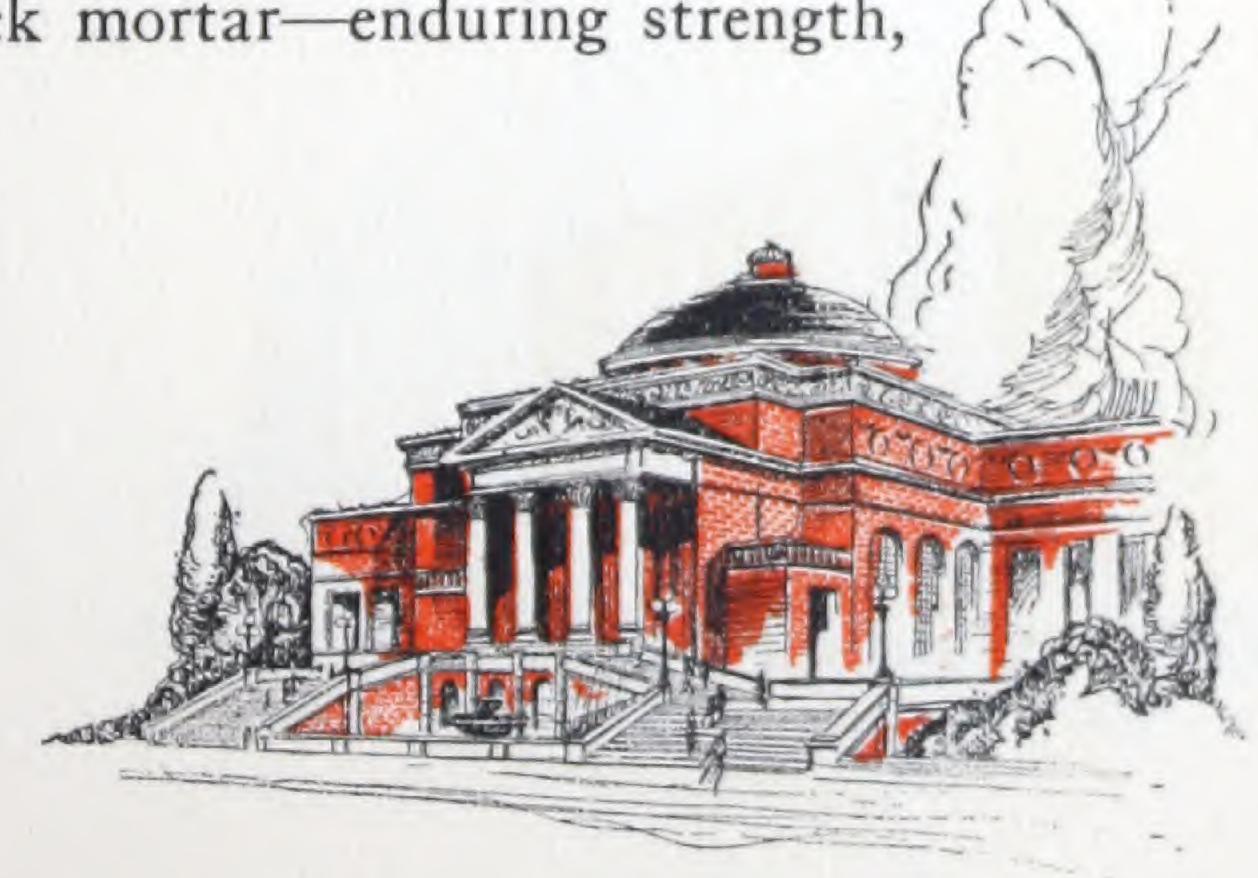


30

30

ing its use for brick work of all kinds. We find that the working qualities of this cement is all that you claim for it, the masons find it more plastic, and easier to handle, than mortar made of other cements of a similar nature. Our experience further shows that it is more economical to use than mortar made of Portland Cement and Lime, and furthermore we find it makes as strong a job in every respect as the tempered Portland Cement mortar. We might further add that we have had less freezing of joints with mortar made of BRIXMENT than with any other mortar we have ever used, and this in itself is a big factor in its favor, especially on work done in as changeable a climate as we have in this vicinity.'

From the foregoing facts it is apparent that the three most essential elements in the making of brick mortar—enduring strength,



economy and architectural adaptability—have been attained in BRIXMENT to an exclusively high degree.

It is because of these uncommon advantages that architects, engineers and contractors are continually being converted to the use of BRIXMENT exclusively.

BRIXMENT is widely handled by dealers in building materials but if you are unable to obtain it in your city, kindly write us and we shall see that you are promptly supplied.

Louisville Cement Company Incorporated

LOUISVILLE, KENTUCKY



#### CHEMICAL ANALYSIS

| 0.0              |    |  |  |  |  |  |  |  |  |  |  |  |       |
|------------------|----|--|--|--|--|--|--|--|--|--|--|--|-------|
| Si0 <sub>2</sub> |    |  |  |  |  |  |  |  |  |  |  |  | 21.12 |
| $Fe_2O_3\ldots$  |    |  |  |  |  |  |  |  |  |  |  |  | 2.50  |
| $Al_2O_3$        |    |  |  |  |  |  |  |  |  |  |  |  | 5.70  |
| Ca0              |    |  |  |  |  |  |  |  |  |  |  |  | 45.62 |
| Mg0              |    |  |  |  |  |  |  |  |  |  |  |  | 11.36 |
| Ignition Lo      | SS |  |  |  |  |  |  |  |  |  |  |  | 13.70 |

#### PHYSICAL TEST

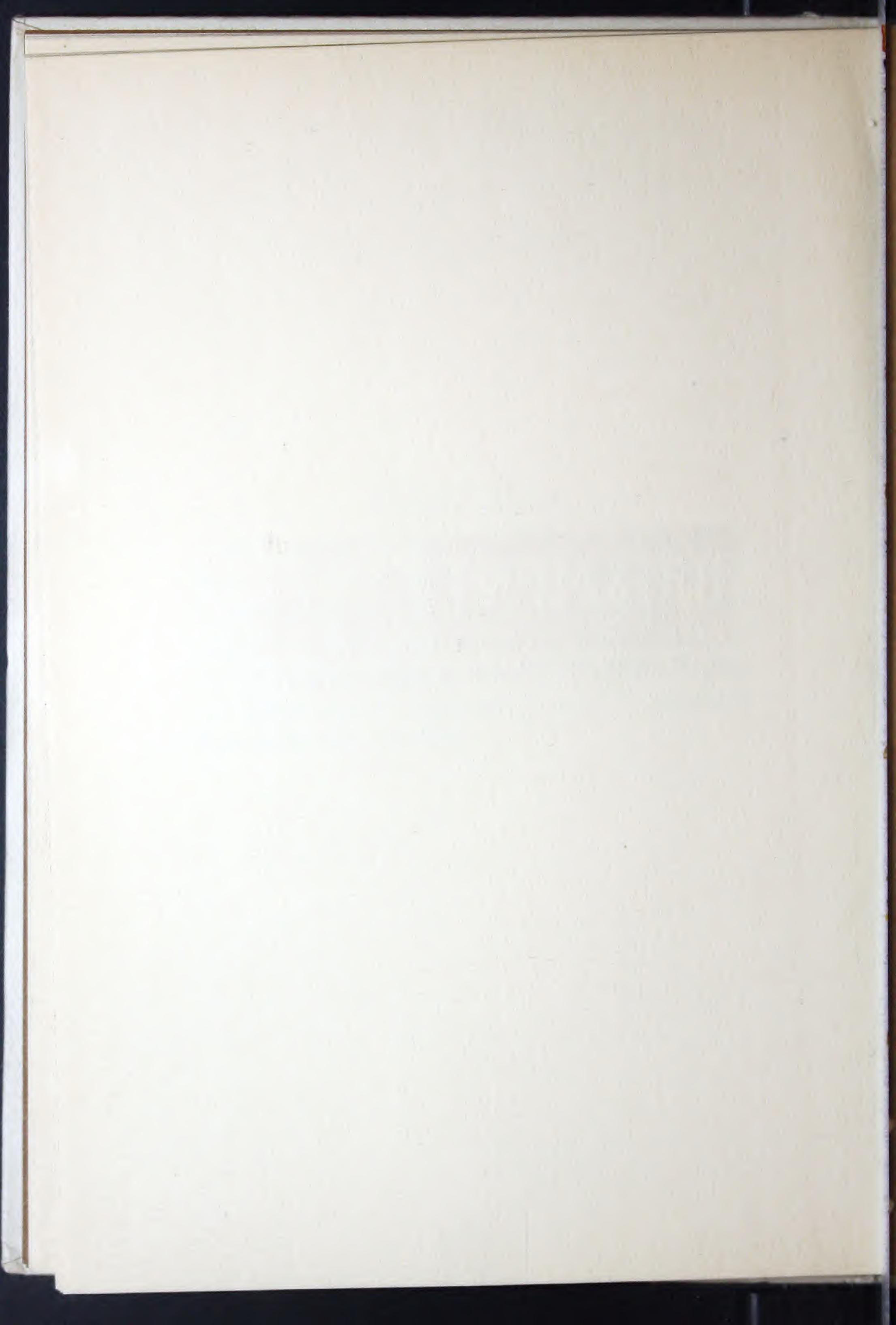
| Fineness 100 96.              | 8 |
|-------------------------------|---|
| Fineness 200                  | 0 |
| Initial Setting 3 hrs. 30 min |   |
| Steam Pat O. K                |   |
| 7 day 3-1 Tensile 76 lbs      |   |
| 28 day 3-1 Tensile            |   |



#### DIRECTIONS

With one part BRIXMENT mix thoroughly three parts dry sand. Add sufficient water to make mortar of proper consistency. The addition of color does not affect the strength of BRIXMENT mortar and BRIXMENT does not affect mortar color; less color is required than with other mortar.













#### [BLANK PAGE]



